

# Run Chart

## Description

A run chart (or control chart) is a line graph showing change in a variable over a selected time period. This is a useful output if you would like to view, for example, the change in CLABSI rate over time in each location at your facility.

## Example

Let's create a graphical representation of the change in CLABSI rates from 2009 through 2011 for each specific location in the facility. By checking the boxes to "Display Overlay Line(s)" and "NHSN Aggregated Pooled Mean" (at the bottom of the modification page), we are allowing a visual comparison of the facility's CLABSI rate with NHSN national aggregate data over the same time period.

## Modification Page

### Control Chart

Analysis Data Set: CLAB\_RatesICU [Export Analysis Data Set](#)

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**Modify Attributes of the Output:**

Last Modified On: 01/09/2012

Output Type: Control Chart

Output Name: Run Chart - CLAB Data for ICU-Other

Output Title: Run Chart for Central Line-Associated BSI Data for ICU

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**Select output format:**

☒ Use Variable Labels

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**Select a time period or Leave Blank for Cumulative Time Period:**

Date Variable Beginning Ending

summaryYr 2009 2011 [Clear Time Period](#)

☐ Enter Date variable/Time period at the time you click the Run button

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**Specify Other Selection Criteria:**

[Show Criteria](#) [Column +](#) [Row +](#) [Clear Criteria](#)



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**Other Options:** [Print](#)

Chart Variable: CLABRate

Group by: location

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**Control Chart Options:**

☒ Display Overlay Line(s)

☒ NHSN Aggregated Pooled Mean ☐ Local Pooled Mean

☐ Reference Line with value =

☐ Smoothing Enabled

☐ 3 Point Moving Average

☐ 5 Point Moving Average

[Run](#) [Save As](#) [Reset](#) [Back](#) [Export Output Data Set](#)

### Top Section of Modification Page:

- In the top section of the modification page, you can modify the name and title of the run chart. **Note:** If you wish to save your modifications as a template for future reports, you will be required to change the output name.

*Tip: For more descriptive variable labels on your run chart, check the box to "Use Variable Labels" (recommended).*

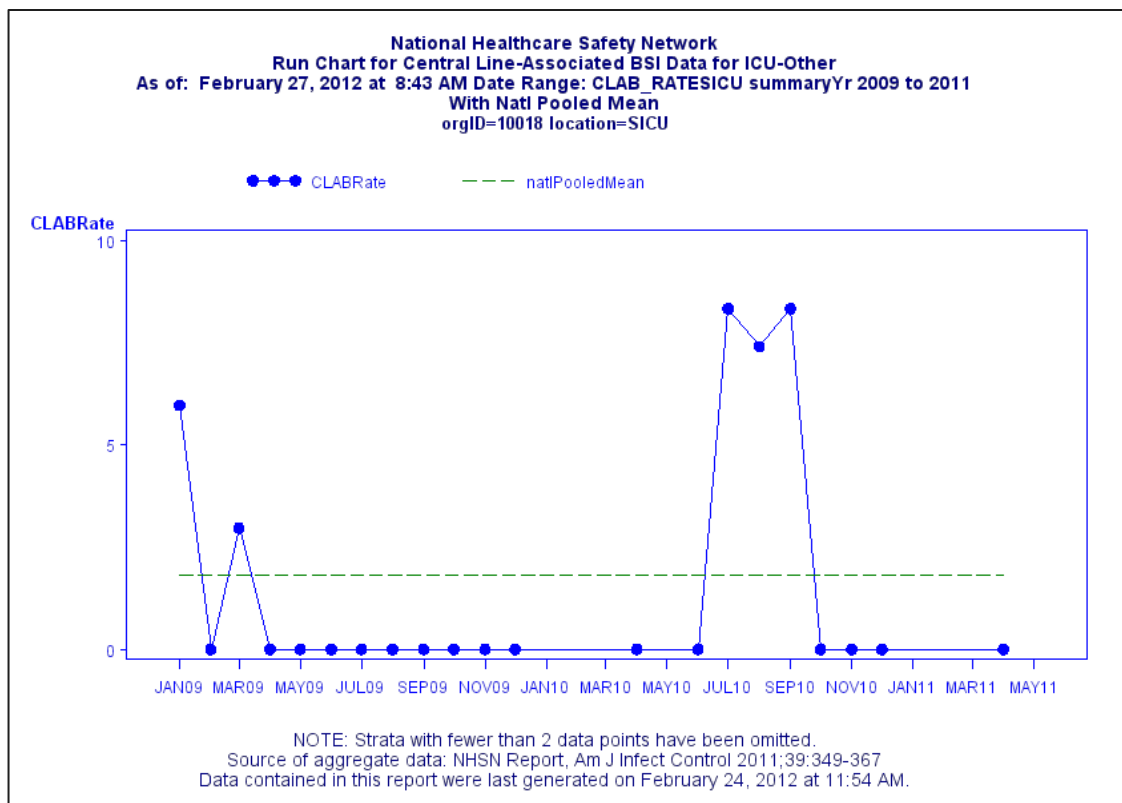
### Middle Section of Modification Page:

- In the middle sections of the page, you can specify a time period and/or filter output by other criteria (e.g., limit to a single location type).
- In this example, we have limited the run chart to CLABSI rates during 2009 through 2011 (summaryYr=2009-2011).
- For additional details about how to use this section, please see the additional resources listed on page 2.

### Bottom Section of Modification Page:

- In the "Other Options" section on the bottom of the page, select the variable you wish to view on the run chart, such as CLABSI rate (CLABRate); this is considered the "chart variable".
- The "Group by" option is automatically set to create separate run charts for each location.
- Monthly rates will always be displayed in the run chart.
- The last section on the modification page shows additional chart options. For comparison purposes, you can insert an overlay line onto your run chart that shows the NHSN aggregated pooled mean, or you can create a reference line with a value of your choice.
- Note:** If you define your own reference line, the same value will be used for each run chart in the output.

## Output/Results and Interpretation



- The facility's monthly CLABSI rates in the surgical ICU are shown by the bolded points connected by the blue solid line during the time period 2009-2011. The NHSN Aggregate Pooled Mean CLABSI rate for this type of ICU is shown as the green dashed line. In this example, the facility was able to keep their CLABSI rate at zero for most of 2010 and at the beginning of 2011; however, there was a drastic increase, above the NHSN pooled mean, from July to September 2010.

### Additional Resources:

Introduction to NHSN Analysis: <http://www.cdc.gov/nhsn/PDFs/training/intro-AnalysisBasics-PSC.pdf>

How to filter data by time period: <http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/FilterTimePeriod.pdf>

How to filter data on additional criteria: <http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/SelectionCriteria.pdf>